

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

Antimicrobials Division (AD)

July 10, 2013

DP BARCODE(s): 410289

MRID(s) : 49040001

SUBJECT:
(Name of Product) NEO

FILE SYMBOL: 6297-R

DOCUMENT TYPE: Product Chemistry Review

Manufacturing-use [] OR End-use Product [X]

INGREDIENTS:

<u>PC Code</u>	<u>CAS #</u>	<u>Ingredient Name(s)</u>
00595	7722-84-1	Hydrogen peroxide

TEST LAB: Bissell Homecare, Inc (Self Certified)

SUBMITTER: Bissell Homecare, Inc

GUIDELINE: Product Chemistry Groups A and B

ORGANIZATION: AD\PSB\CTT

REVIEWER: Earl Goad

APPROVED BY: Karen P. Hicks

DATE APPROVED: July 10, 2013

COMMENT:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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July 10, 2013

MEMORANDUM

SUBJECT: Product Chemistry Review for EPA File Symbol. 6297-R
Product Name: NEO
DP Barcode(s): 410289

CODE: (A540) New Product

DATE DUE: August 5, 2013

FROM: Earl Goad, Biologist
Chemistry and Toxicology Team
Product Science Branch
Antimicrobials Division (7510P)

A handwritten signature in black ink, appearing to read "Earl Goad".

THRU: Karen Hicks, Team Leader
Chemistry and Toxicology Team
Product Science Branch
Antimicrobials Division (7510P)

A handwritten signature in black ink, appearing to read "Karen Hicks".

for KPH

TO: Marshall Swindell PM#33/Reviewer
Regulatory Management Branch I
Antimicrobials Division (7510P)

Applicant: Bissell Homecare, Inc.

PRODUCT FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>	<u>% by wt.</u>
Hydrogen peroxide	4.67
<u>Other Ingredient(s):</u>	<u>95.33</u>
Total:	100.00

BACKGROUND:

Technology Services Group, Inc. of behalf of Bissell Homecare, Inc. has submitted an application to register their new non-food end use product, EPA File Symbol 6297-R "NEO". The product is formulated from an EPA registered source of the active ingredient and is labeled for use with carpet cleaning machines as a cleaner and deodorizer for carpets.

The documents used from the submission include:

1. Cover and study transmittal letter February 8, 2013.
2. EPA Form 8570-35 (Data Matrix) dated February 6, 2013.
3. Confidential Statements of Formula for the basic formulation dated January 31, 2013.
4. Proposed product label dated February 6, 2013.
5. Information provided with PRIA 21-day screening material: Communications with the registrant, fragrance certifications, inert clearance status form dated February 25, 2013.
6. 21 Day Inerts Screen report and e-mails regarding uncleared inert mixtures, dated February 26, 2013.
7. Group A and B Product Chemistry Study.

MRID	Citation
49040001	Reynolds, M.; Velea, L. (2013) NEO Chemistry Data/Product Properties - Groups A & B. Project Number: NEO/20130206/1. Unpublished study prepared by Bissell Homecare, Inc. 129p.

FINDINGS:

1. Confidential Statement of Formula. The basic CSF dated January 31, 2013 is acceptable. The inert issues reported by the 21 Day Inerts Screen were resolved, all subject inerts and inert mixture being found acceptable for non-food use.
2. Proposed product label: The chemistry portions of the product label appear to be accurate and complete.
3. Product Chemistry Groups A and B.
 - a. The Group B Product Chemistry requirements are supported by self certification as reported by using EPA Forms 8570-36 and 8570-37 dated February 8, 2013. These forms were included in MRID 49040001
 - b. Except for the one year product storage stability and corrosion characteristics studies, which the registrant reports as being in process, both groups A and B data requirements have been satisfied.

CONCLUSION:

The basic CSF dated January 31, 2013, proposed product label and product chemistry groups A and B are found acceptable. The one year product storage stability that is underway must be reported to the Agency upon completion.

PRODUCT CHEMISTRY REVIEW

I. CONFIDENTIAL STATEMENT OF FORMULA

a. Type of formulation and source registration:

- | | | |
|-------------------------------------|---------|--------|
| • Non-integrated formulation system | Yes [X] | No [] |
| • Are all TGAs used registered? | Yes [X] | No [] |
| • Integrated formulation system | Yes [] | No [X] |

b. Clearance of inerts for non-food or food use:

The product is cleared for food use under 40 CFR §§180.940 and 180.950.

Yes [] No [x]

Note: This product is not intended for food use. All inert ingredients have PC codes. All formulation components are listed on the EPA document "Inert Ingredients Permitted for Use in Nonfood Use Pesticide Products," available at http://www.epa.gov/opprd001/inerts/inert_nonfooduse.pdf.

c. Physical state of product:

Liquid

d. The chemical IDs and analytical information (including that for the TGAs), density, pH, and flammability are consistent with that given in 830 Series, Group B.

Yes [X] No []

e. The NCs and CLs are acceptable.

Yes [X] No []

f. Active ingredient

<u>Active Ingredient:</u>	<u>Nominal%</u>	<u>Upper Limit%</u>	<u>Lower Limit%</u>
Hydrogen peroxide	4.67%	4.90	4.44

g. For products produced by an integrated formulation system:

- Do all impurities of toxicological significance have a UCL?
Yes [] No [] Not applicable [X]
- Have all impurities of $\geq 0.1\%$ in the product been identified?
Yes [] No [] Not applicable [X]

II PRODUCT LABEL

a. The active ingredients statement (chemical IDs and NC) is consistent with the CONFIDENTIAL STATEMENT OF FORMULA. Yes [X] No []

b. The formula contains one of the following:

- | | | |
|--|---------|--------|
| • 10% or more of a petroleum distillate: | Yes [] | No [X] |
| • 1.0% or more of methyl alcohol: | Yes [] | No [X] |
| • sodium nitrite at any level: | Yes [] | No [X] |
| • a toxic List 1 inert at any level: | Yes [] | No [X] |
| • arsenic in any form: | Yes [] | No [X] |

a. If "yes" to any of the above, does the inert ingredients statement contain a footnote indicating this?

Yes [] No [] Not applicable [X]

d. Appropriate warning statement(s) regarding flammability or explosive characteristics of the product are listed on the label.

Yes [] No [] Not applicable [X]

e. The storage and disposal instructions for the pesticide container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses.

Yes [X] No []

f. The product requires an expiration date at which time the NC falls below the LCL (based on the 1-year storage stability data or other information).

Yes [x] No []

Note: Storage stability and corrosion characteristics studies are in progress, results are required, and results must be reported to the Agency upon completion.

Table A:
Product Chemistry (Series 830, Group A)

Data Requirements	Acceptance of Information	MRID No.
830.1550 Product Identity ¹	A	49040001
830.1600 Description of Materials	A	49040001 and CSF
830.1620 Production Process ²	NA	
830.1650 Formulation Process ³	A	49040001
830.1670 Formation of Impurities ⁴	A	49040001
830.1700 Preliminary Analysis ⁵	Registered source preliminary analysis not applicable	49040001
830.1750 Certified Limits ⁶	A – EPA Standard certified limits. A signed certification statement was provided, as requested under OPPTS 830.1750(g).	49040001
830.1800 Enforcement Analytical Method ⁷	A – Titration	49040001 Attachment A
830.1900 Submittal of Samples	<i>[Samples are to be provided on a case-by-case basis for end-use products.]</i>	49040001

Explanation: A=acceptable; N=not acceptable (i.e., item was submitted but is not acceptable); NA=technically not applicable (i.e., not required); G=data gap (i.e., item was not submitted but is required); U=requires upgrading (i.e., item is unacceptable but upgradeable); W=waived; E=EPA estimate.

¹See Confidential Appendix A for additional information.

²For MP/EP products produced by an integrated formulation system.

³For products from a TGA1 or MP.

⁴May be waived unless actual/possible impurities are of toxicological concern.

⁵Five batch analysis required for products produced by an integrated formulation system.

⁶If different from standard CLs recommended in 40 CFR 158.175, this should be discussed in Confidential Appendix A.

⁷Abbreviate method used as follows: gas chromatography (GC), infrared (IR), ultraviolet absorption (UV), nuclear magnetic resonance (NMR), etc.

Table B:
Physical and Chemical Characteristics (Series 830, Group B)

Physical/Chemical Properties*	Acceptance of Data	Value or Qualitative Description	MRID No.
830.6302 Color	A	Clear, colorless	49040001 Form 8570-36
830.6303 Physical State	A	Liquid	49040001 Form 8570-36
830.6304 Odor	A	Of added fragrance	49040001 Form 8570-36
830.6313 Stability to Normal and Elevated Temperatures, Metals, and Metal Ions	NA	<i>[Not required for end-use products.]</i>	
830.6314 Oxidation/Reduction; Chemical Incompatibility	A	Though Hydrogen peroxide is a strong, intended formulation has low concentration compatible with other cleaning agents.	49040001 Form 8570-36
830.6315 Flammability/Flame Extension	A	Waiver requested – aqueous formulation does not contain combustible materials	49040001 Form 8570-36
830.6316 Explodability	NA	Waiver requested – aqueous formulation does not contain explosive materials	49040001 Form 8570-36
830.6317 Storage Stability	G	A storage stability study is in progress; results of which will be reported to the Agency upon completion.	49040001 Form 8570-36
830.6319 Miscibility ¹	NA	Not intended to be diluted in petroleum	49040001 Form 8570-36
830.6320 Corrosion Characteristics	G	A corrosion characteristics study is in progress; results of which will be reported to the Agency upon completion	49040001 Form 8570-36
830.6321 Dielectric Breakdown Voltage	NA	Not Applicable – product not intended for use on or around electrical equipment or electrical conduits.	49040001 Form 8570-36
830.7000 pH ²	A	The pH 1.3 at 25°C	49040001 Form 8570-36

Physical/Chemical Properties*	Acceptance of Data	Value or Qualitative Description	MRID No.
830.7050 UV/Visible Absorption	NA	[Not required for end-use products.]	
830.7100 Viscosity	A	2.5 mPa*s(cP) at 21°C (Brookfield LV, spd#1, 12 rpm)	49040001 Form 8570-36
830.7200 Melting Point/Melting Range	NA	[Not required for end-use products.]	
830.7220 Boiling Point/Boiling Range	NA	[Not required for end-use products.]	
830.7300 Density/Relative Density/Bulk Density	A	1.51 at 25°C (8.77 lbs/gal)	49040001 CSF
830.7370 Dissociation Constants in Water	NA	[Not required for end-use products.]	
830.7550/830.7560/830.7570 Partition Coefficient	NA	[Not required for end-use products.]	
830.7840/830.7860 Water Solubility	NA	[Not required for end-use products.]	
830.7950 Vapor Pressure	NA	[Not required for end-use products.]	

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* Provide brief description, e.g., color – yellow or property value, e.g., density 1.25 g/cc. Unless otherwise indicated, the property should be at 25°C.

¹If product is an emulsifiable liquid

²If product is dispersible with water